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(54) Title: **A PROCESS FOR ENHANCED RECOVERY OF CRUDE OIL FROM OIL WELLS USING NOVEL MICROBIAL CONSORTIUM**

(57) Abstract: The present invention provides a microbial consortium containing three hyperthermophilic, barophilic, acidogenic, anaerobic bacterial strains for enhanced oil recovery from oil reservoirs where temperatures range from 70 °C to 90 °C. The said microbial consortium is unique in producing a variety of metabolic products mainly CO<sub>2</sub>, methane, biosurfactant, volatile fatty acids and alcohols in the presence of specially designed nutrient medium. These metabolic products increase sweep efficiency of crude oil from oil bearing pores of rock formation. The present invention also provides a process for enhancing the oil recovery by *in situ* application of the said microbial consortium

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